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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/465,147	12/16/1999	JAMES E. GRIMES	30-GF-1083	8528

7590

04/08/2003

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EXAMINER

PEIKARI, BEHZAD

ART UNIT

PAPER NUMBER

2186

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/465,147

Applicant(s)

GRIMES ET AL.

Examiner

B. James Peikari

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings that are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sexton, U.S. 5,056,001.

Sexton teaches all of the features of the present claims with a PLC system (*shown in Figure 1*), including a "memory host module" (15) including a CPU (20) and memory (35 and 40), at least one option module (*e.g.*, 75A) including a CPU (*note column 4, lines 4-9*) and memory (102), a backplane (*i.e.*, *the circuitry and mechanical elements used to route data between data processing elements; note elements 25, 55 and 25A*) interconnecting the memory host module and the option module, and further including the ability to store in the memory of the memory host module an operating

program and data for the option module (*note column 2, line 50-52, "(RAM) 40 is coupled to main bus 25 to provide memory space for CPU 20 to conduct PLC operations and store user programs).*

Sexton further teaches the ability to transfer programs from the memory (40) of the host module to memory (102) of the option module (*note columns 5 and 6, especially the "send configuration file" command, which causes a set of programming instructions called the "configuration file" to be sent from the host module to the option module to configure it to operate in a given mode and behave a certain way).*

Sexton further teaches the ability to transfer programs from the memory (102) of the option module to memory (40) of the host module (*note columns 5 and 6, especially the "request configuration file" command, which causes the current set of local programming instructions called the "configuration file" to be sent from the option module to the host module, so that the host will have information regarding the current mode of operation of the option module).*

Sexton further teaches an external device interface (45) for transferring the operating program from an external device (60) to the option module through the host module via the backplane, and vice versa (*note the connections of Figure 1 and column 5, lines 10-55).*

As for the option module having its own external device interface different from the one contained on the host module, it actually has two one for input or output (*input, in the case of module 75A*) and the other interface (104) for communicating with the host module.

Response to Request for Reconsideration

4. The Request for Reconsideration filed on January 23, 2003 has been carefully considered, but is not deemed convincing for at least the following reasons.

First, it is noted that Sexton *does* teach storing an operating program for the option module in the memory of the host module. Note that the PLC contains a CPU, and thus should be considered the host.

The claims are not limited to where the control program *originates* – only where it is *stored*. Although the PLC may receive control information from elsewhere (applicant and the examiner appear to be in agreement on this point), there can be no question that the control program is *stored* in the PLC (host) prior to controlling a process.

The same is true with the data (i.e., configuration information) that is sent.

Applicant is encouraged to contact the examiner directly at the telephone number provided below if further explanation is required.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note that McNutt et al. was essentially the same as the claimed invention, except that the option modules contain "control logic" (but not a CPU per se), however, a rejection based on this reference was not deemed necessary at this time.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Peikari whose telephone number is (703) 305-3824. The examiner is generally available between 11:00 am and 9:00 pm, EST, and on weekends.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim, can be reached at (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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or faxed to:

(703) 746-7239 (Official communications)

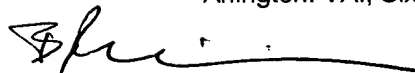
or:

(703) 746-7240 (for Informal or Draft communications)

or:

(703) 746-7238 (for After-Final communications)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).



B. James Peikari
Primary Examiner
Art Unit 2186

April 7, 2003